

THE NATIONAL DIPLOMA IN BEEKEEPING

EXAMINATION FOR THE NATIONAL DIPLOMA IN BEEKEEPING

March 2011

Instructions to Candidates- Time allowed - 3 hours
Answer **QUESTION ONE** and **THREE** other questions only.
Use only **BLACK** pen for the text.
Please start each question on a new page.
Pencil may be used for the diagrams.
Marks will be awarded for clear diagrams where relevant.

- Q1 Colony losses have been experienced worldwide. Discuss the possible factors involved in colony losses in the USA and the UK. Your answer should include advice on how to avoid continuing losses in the UK. 25
- Q2 Advise a young hobby beekeeper with 10 colonies owning a rural property of 10 acres on what is required to expand the operation to be commercially viable and a sole source of income. 25
- Q3 Describe how to set up and manage a queen breeding and rearing programme with the aim of selling up to 150 mated queens annually to hobby beekeepers. 25
- Q4 Give an account of research in the 20th century on the subject of bee navigation, and describe changes in our understanding of the mechanisms involved, and controversies raised. 25
- Q5 Describe, with illustrations, the exocrine glands of the queen honey bee, and their structure and functions. 25
- Q6 Give an account of the work of any four of the following: Beowulf Cooper; Dr. Eva Crane; Dr Martin Lindauer; Dr Ronald Ribbands; Prof. Tom Seeley; Frederick Sladen. 25